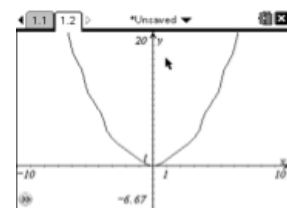


3.7b Implicit Differentiation

Show that dy/dx is defined at every point on the graph of $2y = x^2 + \sin(y)$

Graph the curve using parametric equations



Sep 29-7:40 AM

$$x^2 - 2xy + y^2 = 4$$

1. Find dy/dx

2. Use dy/dx to sketch a possible graph of the implicit curve.

3. Factor the left side and solve for y . How does this compare with your graph?

Sep 29-8:00 AM

Prove the power rule for rational exponents

Sep 29-8:12 AM

Find the slope of the Folium of Descartes at the points (4,2) and (2,4).

$$x^3 + y^3 - 9xy = 0$$

Find the points where the folium has: (a) a horizontal tangent;
(b) a vertical tangent

Sep 29-8:15 AM